

ABSTRACT OF THE DISCLOSURE

A semiconductor device is provided including a transistor having excellent ON current characteristics and OFF leakage current characteristics, an electro-optical device holding an electro-optical material using the semiconductor device, an electronic apparatus using the electro-optical device, and a method for manufacturing the semiconductor device. For a transistor, a source region and a drain region are impurity regions heavily doped by a self-aligned method relative to a gate electrode. Parts of the gate insulating film overlapping with boundary regions of the channel formation region adjacent to the drain region and the source region, are thicker than a part of the gate insulating film overlapping with a center part of the channel formation region, relative to the longitudinal direction of the channel.